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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,613	08/07/2003	Peter A. Krauss	010408.52554US	9614

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EXAMINER	
CRIBBS, MALCOLM D	

ART UNIT	PAPER NUMBER
2115	

MAIL DATE	DELIVERY MODE
12/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/635,613	KRAUSS, PETER A.	
	Examiner	Art Unit	
	Malcolm D. Cribbs	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 21-30* is/are rejected.

7)☐ Claim(s) *17-20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 12-30 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Betz et al [Publication No. US 2003/0046359].

As per claim 12, Betz teaches the invention comprising:

loading a non-compressed boot program from a first data memory into a volatile working memory [Page 3 paragraph 0036 wherein "a boot program is retrieved from the FLASH memory"];

executing the boot program [Page 3 paragraph 0036 wherein "boot program is used" thus inherently the boot program is executed];

copying, initiated by the boot program, of a compressed application program from a second data memory into a volatile working memory with simultaneous

decompression of the application program, and starting the application program through the boot program [Page 3 paragraph 0036 wherein the boot program is used to retrieve and decompress one or more programs stored within the FLASH memory and thereafter storing the programs in the SDRAM to be run].

The examiner notes that Betz does not explicitly teach a first and second data memory and a first and second volatile memory however as known to one of ordinary skill in the art a single memory can be made up of separate partitions for containing separate data such as a separate partition in ROM for a boot program and applications and separate partitions in RAM for the boot program and the applications loaded from ROM [as taught by Wadsworth et al [Patent No. US 5,701,492; Fig. 4 col 8 lines 16-24]]. Thus, inherently Betz would include a first and second data memory and a first and second volatile memory. Further, as stated in the specification of Peter Krauss, the memory can be a uniform memory or ... separate memories [Page 2 line 26 – Page 3 line 1].

As per claim 13, it would have been obvious to one of ordinary skill in the art to include a start process control device, which is a means to start the loading of the boot program wherein without the means the boot program would not load and start the execution of the application programs.

As per claim 14, Betz teaches the invention wherein a first non-volatile memory of said data processing device is used as said data memory of said boot program, and a second non-volatile memory of said data processing device is used as said data memory of said application program [as taught above in regards to claim 1].

As per claims 15, and 16, it would have been obvious to one of ordinary skill in the art to include an interface device to access the first and/or second memory, wherein there must exist a mean to access the memory and to begin the transfer between the two memories.

Claims 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As per claims 21, Betz discloses the claimed invention comprising:

a data structure stored in said computer-readable memory, said data structure including information used by said boot program and including:

a plurality of data memory fields for storing an application program in compressed form [Page 2-3; paragraph [0027], flash memory 185 and compressed programs 186; Page 3, paragraph [0036]]; and

a plurality if volatile working memory fields for receiving a copy of said application program in uncompressed form [Page 3; paragraph [0027 and 0036], decompressed programs are stored in SRAM 175];

wherein said boot program starts said application program [Page 3; paragraph [0036], step 406 the boot program is used to retrieve and decompress one or more programs stored on the FLASH].

As per claim 22, Betz teaches the invention further comprising a machine-readable program carrier, wherein said boot program is stored as electronically readable control signals on said machine-readable program carrier [Page 2-3 paragraph 0027].

As per claim 23, Betz teaches the invention comprising:

a first data memory;

a first volatile working memory;

a second data memory; and

a second volatile working memory;

wherein said first data memory is used to store a non-compressed boot program and said first volatile working memory being used to hold a copy of said boot program [Page 3 paragraph 0036 wherein a boot program is retrieved from the FLASH memory and stored in RAM; Although Betz does not explicitly teach a first and second data memory and a first and second volatile memory however as known to one of ordinary

skill in the art a single memory can be made up of separate partitions for containing separate data such as a separate partition in ROM for a boot program and applications and separate partitions in RAM for the boot program and the applications loaded from ROM [as taught by Wadsworth et al [Patent No. US 5,701,492; Fig. 4 col 8 lines 16-24]]. Thus, inherently Betz would include a first and second data memory and a first and second volatile memory. Further, as stated in the specification of Peter Krauss, the memory can be a uniform memory or ... separate memories [Page 2 line 26 – Page 3 line 1]].

As per claims 24-30, it is directed to an apparatus to implement the method of steps as set forth in claims 12-20. Therefore, it is rejected on the same basis as set forth hereinabove.

Response to Arguments

Applicant's arguments filed 11/21/07 have been fully considered but they are not persuasive. While the examiner agrees with applicant's position that Betz et al do not explicitly teach the interaction between the boot program and the decompressed program, the examiner submits that, inherently, the execution of the decompressed program is started through the boot program. Specifically, Betz et al teach that "the decompressed main programs are stored in the SDARM 185", [0036, LINES 12 – 13], emphasis added by the examiner. Right after the powering up of the modem, the modem is under the direct control of the boot program. Under the control of the boot

program, the compressed main programs stored in FLASH memory 183 are copied and decompressed in the SDRAM 185. After the completion of the decompression of the main programs, the modem is still under the control of the boot program. In other words, only the boot program knows about the completion of the decompression of the main programs. As such, in order to run the decompressed main programs, inherently, the boot program has to start the execution of the main programs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malcolm D. Cribbs whose telephone number is 571-272-5689. The examiner can normally be reached on M-F 8AM-430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Malcolm D Cribbs

Examiner

Art Unit 2115

5 12/20/07

CHUN CAO
PRIMARY EXAMINER